

REMARKS

Claims 1-4 and 7-22 are currently pending in the application. By this response, claim 22 is added for the Examiner's consideration. The above amendments do not add new matter to the application and are fully supported by the original disclosure. For example, support for the amendments is provided in the claims as originally filed, at Figure 1, and at pages 1-3 of the specification. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

35 U.S.C. §103 Rejection

Claims 1-3, 7-12, and 16-19 were rejected under 35 U.S.C. §103(a) for being unpatentable over U.S. Patent Application Publication No. 2004/0101649 issued to Thoma (“Thoma”) or U.S. Patent No. 823,843 issued to Buyten (“Buyten”) in view of U.S. Patent No. 6,696,167 issued to Sean *et al.* (“Sean”).

Claims 4, 13-15, 20, and 21 were rejected under 35 U.S.C. §103(a) for being unpatentable over Thoma or Buyten in view of Sean, and further in view of U.S. Patent No. 5,275,862 issued to Ramadan *et al.* (“Ramadan”).

These rejections are respectfully traversed. The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations (See MPEP §2142). Applicants submit that no proper combination of the applied references teaches or suggests all of the features of the claimed invention.

Claims 1-3, 7-12, and 16-19 in view of Thoma/Buyten and Sean

Claims 1-3 and 7-10

The present invention relates to a building board for use as a ceiling or wall element. The building board comprises a plurality of oriented strand boards (OSBs) bonded together to form multiple layers. In non-limiting exemplary embodiments of the invention, interspaces are

formed between the boards of a layer. The interspaces may be left devoid of additional material, or may be filled with insulating material. Independent claim 1 recites, in pertinent part:

... a plurality of orientated strand boards (OSBs) which are disposed side by side and are bonded together in multiple layers, further comprising some interspaces filled with an insulating material and other interspaces devoid of the insulating material.

The applied references do not teach or suggest these features. More particularly, the applied references do not teach or suggest that some interspaces are filled with an insulating material while other interspaces are devoid of the insulating material.

The Examiner is of the opinion that Thoma and Buyten each show all of the features of claim 1 except for the use of OSB, that Sean teaches the equivalence of wood and wood products having OSB, and that it would have been obvious to modify Thoma or Buyten to use wood products comprising OSB. More specifically, the Examiner asserts that, in Thoma, space 6 constitutes an interspace devoid of insulating material and piece 3d constitutes an interspace filled with an insulating material. Applicants respectfully disagree.

Thoma shows a laminated wood element comprising layers 2a, 2b, 2c, 2d, etc. Each layer comprises a plurality of wood elements 3a, 3b, 3c, 3d, etc. Recesses 6 are provided between the individual wood elements 3b of a layer 2b. While recess 6 may constitute an interspace devoid of insulating material, Thoma does not show interspaces filled with insulating material. Contrary to the Examiner's assertion, board 3d does not constitute an interspace filled with insulating material. That is, board 3d constitutes part of the plurality of boards which are disposed side by side and bonded together in multiple layers. There is no interspace between the boards where board 3d resides, because board 3d is bonded to the boards adjacent to it. Thus, because there is no interspace, there cannot arguably be an interspace filled with insulating material, as recited in claim 1.

Applicants acknowledge that, during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. MPEP §2111. However, Applicants submit that the Examiner's interpretation of the term "interspaces filled with insulating material" is not consistent with the specification of the instant application. That is, in the specification and figures, the interspaces between the OSB's are smaller in size than the

OSB's, and the insulating material is shown with a different cross-hatching than the OSB's. As such, the Examiner's position that one of the boards may constitute insulating material between two other identical boards does not appear consistent with the specification. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this interpretation.

With respect to Buyten, the Examiner has provided no explanation of how Buyten and Sean teach or suggest all of the elements recited in claim 1 as amended as of December 1, 2006. Contrary to the Examiner's assertions in the Advisory Action dated March 23, 2007, the Final Office Action dated December 20, 2006 does not explain how Buyten and Sean teach the features of claim 1 as amended as of December 1, 2006. Moreover, the explanation provided in the Non-Final Office Action dated September 14, 2006 cannot be considered to provide such an explanation because claim 1 was amended after the Non-Final Office Action.

In any event, Applicants submit that neither Buyten nor Sean shows some interspaces are filled with an insulating material while other interspaces are devoid of the insulating material. Buyten shows layers of connected strips c, d, e. The strips of each layer do not contact each other, but are spaced to form openings c', d', e'. These openings may constitute interspaces devoid of insulating material, but Buyten does not also show interspaces filled with insulating material.

Sean does not cure the deficiencies of Thoma or Buyten with respect to claim 1. Sean discloses a composition of panels, and makes no mention whatsoever of layers of boards having some interspaces filled with an insulating material and other interspaces are devoid of the insulating material. Therefore, the applied references do not teach or suggest the combination of features recited in independent claim 1.

Claims 2, 3, and 7-10 depend from allowable claim 1, and are allowable at least for the reasons discussed above with respect to claim 1.

Accordingly, Applicants respectfully request that the rejection over claims 1-3 and 7-10 be withdrawn.

Claims 11, 12, and 16-19

Applicants appreciate the Examiner's clarification in the Advisory Action dated March 23, 2007 that claims 13-15, 20, and 21 are rejected over Thoma or Buyten each in view of Sean and further in view of Ramadan. Presumably this means that claims 11-12 and 16-19 are rejected in view of Thoma or Buyten each in view of Sean. This rejection is traversed.

While discussing the rejection of claims 1-3, 7-12, and 16-19 on pages 2-3 of the Final Office Action, the Examiner states:

Concerning claims 11 and 12-21, these claims are obvious over the prior art for the same reason that claims 1-3 and 7-10 are obvious over the prior art for the reasons set forth in the previous rejection dated 9/14/06 and for the reasons set forth above.

Also, in the Advisory Action dated March 23, 2007, the Examiner asserts claims 11 and 16

... were rejected for the same reasons as claims 1-3 and 7-10 in the first office action and for the reasons of record in the Final rejection. Namely, any of the boards in the products of Thoma or Buyten can be considered an interspace filled with insulation material.

With respect to claims 11, 12, and 16-19, Applicants submit that these claims recite features (and combinations of features) that are not present in claims 1-3 and 7-10, such that any explanation of a rejection of claims 1-3 and 7-10 cannot suffice as an explanation of a rejection of claims 11, 12, and 16-19. For example, independent claim 11 recites a structural relationship between outer and inner layers of OSB's, and various interspaces within these layers. Independent claim 16 recites a structural relationship between an outermost layer, an inner layer, and a third layer, and various interspaces within these layers. Claims 1-3 and 7-10 do not recite these layers, and therefore, an explanation of a rejection of claims 1-3 and 7-10, by definition, fails to address the features of claims 11, 12, and 16-19. As such, a *prima facie* case of obviousness has not been established with respect to claims 11 and 16, and the rejection of these claims should be withdrawn.

In any event, Applicants submit that no proper combination of the applied art teaches or suggests all of the features of the claimed invention. None of the applied references teaches or suggests: an outer layer of first OSBs disposed side by side having first interspaces between the first OSBs filled with an insulating material, and an inner layer of second OSBs disposed side by side having second interspaces between the second OSBs devoid of the insulating material, as recited in claim 11. As discussed above, none of the applied references teaches or suggests interspaces between boards filled with insulating material and other interspaces between boards devoid of insulating material.

Moreover, none of the applied references teaches or suggests: an outermost layer of OSBs, an inner layer of OSBs, and a third layer of OSBs, where the outermost layer include interspaces filled with insulating material, as recited in claim 16. None of the applied references show an outermost layer of OSBs having interspaces filled with an insulating material. Nor has the Examiner identified this feature in any of the applied references.

Claims 12 and 17-19 depend from allowable claims 11 and 16, and are allowable at least for the reasons discussed above with respect to claims 11 and 16.

Accordingly, Applicants respectfully request that the rejection over claims 11, 12, and 16-19 be withdrawn.

Claims 4, 13-15, 20, and 21 in view of Thoma/Buyten and Sean, and further in view of Ramadan

Claim 4

Claim 4 depends from allowable claim 1, and is allowable at least for the reasons discussed above with respect to claim 1. Moreover, Ramadan does not compensate for the deficiencies of Thoma, Buyten, and Sean with respect to claim 1. That is, Ramadan does not disclose interspaces, much less some interspaces filled with an insulating material and other interspaces devoid of the insulating material. Therefore, no proper combination of the applied references teaches or suggests the combination of features recited in the claimed invention.

Furthermore, Applicants repeat the argument that there is no motivation to further modify either Thoma or Buyten as suggested in the final Office Action. One of the three basic criteria for establishing a *prima facie* case of obviousness is that there must be a reasonable expectation of success. Applicants submit that there is no reasonable expectation of success for the proposed modification.

As previously discussed, Ramadan discloses a multi-ply panel board with a shaped edge. The board comprises wood layers (col. 2, lines 23-28). An intermediate layer composed of cloth, glass fibers, or plastics is disposed between the wood layers (col. 2, lines 43-48). The edges of the board are sculpted to expose the intermediate layers as decorative stripes (col. 2, lines 49-53). Put another way, the edge of the board is beveled to show the alternate layers to give a different design to the strip along the beveled edge (col. 3, lines 22-26; and FIG. 3).

Neither Thoma nor Buyten has a beveled edge. Without a beveled edge, merely adding a plastic mat between layers of Thoma or Buyten, as suggested by the Examiner, would not

achieve the decorative shaped/sculpted/beveled edge taught by Ramadan. Therefore, there is no reasonable expectation of success, and, thus, no motivation to combine the references.

Accordingly, Applicants respectfully request that the rejection over claim 4 be withdrawn.

Claims 13-15, 20, and 21

Claims 13-15 depend from allowable claim 11, and are allowable at least for the reasons discussed above with respect to claim 11. Moreover, the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 13-15, 20, and 21. As discussed above, an explanation of the rejection of claims 1-3 and 7-10 is insufficient to establish a *prima facie* case of obviousness with respect to claims 13-15, 20, and 21 because claims 13-15, 20, and 21 recite features that are not present in claims 1-3 and 7-10. Therefore, the rejection is improper on its face, and should be withdrawn.

In any event, Applicants submit that no proper combination of the applied references teaches or suggests all of the features of claims 13-15, 20, and 21. As described above with respect to claim 4, there is no motivation to further modify Thoma or Buyten in view of Ramadan. Therefore, the applied references do not render the claimed invention obvious.

Accordingly, Applicants respectfully request that the rejection over claims 13-15, 20, and 21 be withdrawn.

Added Claim

By this response, claim 22 is added for the Examiner's consideration. Applicants submit that claim 22 depends from allowable claim 1, and is allowable for the reasons discussed above with respect to claim 1. Moreover, claim 22 recites the interspaces filled with insulating material are disposed in an outermost layer of the plurality of orientated strand boards, and the interspaces devoid of insulating material are disposed in a second layer adjacent the outermost layer. These features are not shown by the applied art.

CONCLUSION

In view of the foregoing remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,
Joachim HASCH et al.



Andrew M. Calderon
Registration No. 38,093

April 17, 2007
Greenblum & Bernstein, P.L.C.
1950 Roland Clarke Place
Reston, Virginia 20191
Telephone: 703-716-1191
Facsimile: 703-716-1180